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THOMAS P. LEONARD DEPUTY STATE FIRE MARSHAL

MEMORANDUM

TO: Heads of Fire Departments

FROM: Stephen D. Coan

State Fire Marshal

DATE: January 30, 2007

SUBJECT: M.G.L. c. 148, §13 Annual Filing – Certificate of Registration and

Underground Storage Tanks

We have received questions regarding underground storage tank (UST) inspections and permit requirements pursuant to 527 CMR 9.00. With the April 30 deadline approaching for filing Certificates of Registration (FP-5) under c.148 §13, it is an opportune time to review the requirements for underground storage tanks under the State Fire Code. Below is a minimum list of items that we recommend be verified prior to issuing Registrations (FP-5) or Permits (FP-290).

Underground Storage Tank Requirements:

- 1. Verify that all leak detection equipment has been operated and maintained in accordance with the manufacturer's instructions; including routine maintenance and service checks for operability. Assure that the equipment is operational and running. [9.05(D)(3)]
- 2. If a product line leak detector is used on pressurized piping and includes an automatic flow restrictor, automatic shutoff device or a continuous alarm system; an annual test of the operation of the leak detector must be conducted in accordance with the manufacturer's requirements. In addition, one of the following must be performed:
 - a. an annual test on the piping;
 - b. monthly monitoring for vapors in the soil; or

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- c. monthly statistical inventory reconciliation (SIR) analysis. [9.05(G)(8)(b)]
- 3. Steel UST's, utilizing a sacrificial or galvanic anode cathodic protection system, shall be tested in accordance with the following:
 - a. If test results indicate a negative voltage of at least –0.90 volts, the system shall be tested at three-year intervals;
 - b. If test results indicate a negative voltage between -0.85 to -0.90, the system shall be tested annually thereafter;
 - c. If test results indicate a negative voltage of less than -0.85, the system is inadequate and should be evaluated by a corrosion expert. [9.05(H)(4)]
- 4. Steel UST's protected by an impressed current cathodic protection system, should have the system tested upon installation and annually thereafter. In addition to annual testing, impressed current systems shall be inspected every 60 days to ensure the equipment is operating as designed.
 - Acceptable system operating voltage and amperage ranges shall be affixed to the rectifier. System voltage and amperage readings shall be recorded every 60 days. If system voltage or amperage readings are outside the range determined to be acceptable, a corrosion expert should evaluate the system. [9.05(H)(5)]
- 5. Owners and operators of UST's must demonstrate financial responsibility for taking corrective action arising from an accidental release of petroleum product. [9.07(N)]. Note: minimum coverage of \$1,000,000 per occurrence is required. A valid Certificate of Compliance from the Department of Revenue will be considered as meeting this requirement.

This office recommends Permits issued under 527 CMR 9.00 expire to coincide with any testing due as outlined above.

Also, as a reminder: for self-service motor fuel stations, fire suppression systems must be in compliance and inspected semi-annually in accordance with 527 CMR 23.00. If the fire suppression system has not been serviced, the station should only operate with an attendant pumping fuel. This is also an opportunity to review all the facilities within your city/town for compliance with MGL 148 section 13 and the requirement for land licenses on premises that utilize flammable/combustible liquids, gases, solids or explosive materials.

If you have any questions please call the Code Compliance & Enforcement Unit at (978) 567-3375 or in western Massachusetts at (413) 587-3181.